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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,127	06/26/2003	Angelina McMullin	END920030009US1	5527
26502	7590	12/23/2010	EXAMINER	
IBM CORPORATION IPLAW SHCB/40-3 1701 NORTH STREET ENDICOTT, NY 13760			BASEHOAR, ADAM L	
			ART UNIT	PAPER NUMBER
			2178	
			NOTIFICATION DATE	DELIVERY MODE
			12/23/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

endiqlaw@us.ibm.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/607,127	MCMULLIN, ANGELINA	
	<b>Examiner</b>	<b>Art Unit</b>	
	ADAM L. BASEHOAR	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3,7,8,14,23,27,33,40 and 41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3,7,8,14,23,27,33,40 and 41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/01/10</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

1. This action is responsive to communications: The Request for Continued Examination (RCE) filed 09/01/10.
2. Claims 40 and 41 have been added as necessitated by the RCE.
3. Claims 3, 7, 8, 14, 23, 27, 33, 40, and 41 are pending in this case. Claims 3, 7, 14, 23, 27, 33, and 40 are independent claims.

### **Information Disclosure Statement**

4. The information disclosure statement (IDS) submitted on 09/01/10 has been considered by the examiner.

### **Allowable Subject Matter**

5. The indicated allowability of claims 3, 7, 8, 14, 23, 27, and 33 is withdrawn in view of newly discovered reference(s). Rejections based on the newly cited reference(s) follow.

### **Claim Objections**

6. Claim 3 is objected to because of the following informalities: Claim 3 ends with two successive periods (“.”). Appropriate correction is required.

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### **Claim Rejections - 35 USC § 101**

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8. Claims 33 and 40-41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In regard to claims 33 and 40, the claims recite an article of manufacture comprising at least one computer usable medium and a computer program product comprising a computer-readable storage device respectively. The specification is silent as to the particular details of what said computer usable medium and said computer-readable storage device comprise (i.e. does not necessarily include hardware), and as such the ordinary meaning of said computer usable medium and said computer-readable storage device includes nonstatutory subject matter that is unpatentable under 35 U.S.C. 101. Accordingly, Claims 33 and 40-41 fail to recite statutory subject matter under 35 U.S.C. 101.

### **Claim Rejections - 35 USC § 102**

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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10. Claims 3, 7, 8, 14, 23, 27, 33, 40, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Khan et al (US-6,157,934 12/05/00).

**-In regard to independent claim 3**, Khan teaches a method of facilitating development of programs, said method comprising: providing an interface of a program; including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output, wherein the spreadsheet of the program is unchangeable by a user; and displaying the output; and wherein having the spreadsheet execute logic of the spreadsheet avoids re-coding of logic of the spreadsheet (column 4, lines 2-39: “electronic form...it is prudent to hide this data from the users to prevent errors...uses electronic forms as the means of allowing users to interface with the spreadsheets...fields and other objects in the forms...are linked to cells in the local spreadsheet...fields in the form display the contents of the cell(s) they are linked to...user edits or enters data in to the form fields, the data is entered into the spreadsheet...instantaneously recalculated, and the new values are automatically updated on the form...does not see and is unable to change any of the cells other than those which are linked to the form...workflow application...calculations are performed in the local spreadsheets...use of spreadsheets to perform calculations also precludes the need to having to write programs...electronic forms as a 'window' for the client user to view...visually appealing user interface and hides the complexity of the spreadsheet from the user”; column 5, lines 29-58; column 8, lines 9-19: "a program or command structure is created in each client computer...outgoing data")(Figs. 1 and 3).

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**-In regard to substantially similar independent claims 7, 23, and 33,** Khan teaches a method, system, and article of manufacture comprising a computer readable medium storing program code for facilitating development of programs, said method comprising: providing an interface of a program; including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output, wherein the spreadsheet of the program is unchangeable by a user; and displaying the output; and wherein the including comprises enabling interaction between the interface and the spreadsheet; and the enabling interaction comprises providing to the spreadsheet one or more inputs from the interface (column 4, lines 2-39: “electronic form...it is prudent to hide this data from the users to prevent errors...uses electronic forms as the means of allowing users to interface with the spreadsheets...fields and other objects in the forms...are linked to cells in the local spreadsheet...fields in the form display the contents of the cell(s) they are linked to...user edits or enters data in to the form fields, the data is entered into the spreadsheet...instantaneously recalculated, and the new values are automatically updated on the form...does not see and is unable to change any of the cells other than those which are linked to the form...workflow application...calculations are performed in the local spreadsheets...use of spreadsheets to perform calculations also precludes the need to having to write programs...electronic forms as a 'window' for the client user to view...visually appealing user interface and hides the complexity of the spreadsheet from the user”; column 5, lines 29-58; column 8, lines 9-19: "a program or command structure is created in each client computer...outgoing data")(Figs. 1 and 3).

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**-In regard to dependent claim 8**, Khan teaches wherein the enabling comprises performing at least one of one or more checks and one or more tasks in preparation of the providing (column 4, lines 2-39: "user edits or enters data...spreadsheet is instantaneously recalculated, and the new values are automatically updated on the form"; column 7, line 25-column 8, line 8: i.e. establishing the links).

**-In regard to substantially similar independent claims 14 and 27**, Khan teaches a method and system of facilitating development of programs, said method comprising: providing an interface of a program; including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output, wherein the spreadsheet of the program is unchangeable by a user; displaying the output; and replacing by other than the user one or more calculations of the spreadsheet and avoiding re-coding of the interface (column 4, lines 2-39: "electronic form...it is prudent to hide this data from the users to prevent errors...uses electronic forms as the means of allowing users to interface with the spreadsheets...fields and other objects in the forms...are linked to cells in the local spreadsheet...fields in the form display the contents of the cell(s) they are linked to...user edits or enters data in to the form fields, the data is entered into the spreadsheet...instantaneously recalculated, and the new values are automatically updated on the form...does not see and is unable to change any of the cells other than those which are linked to the form...workflow application...calculations are performed in the local spreadsheets...use of spreadsheets to perform calculations also precludes the need to having to write programs...electronic forms as a 'window' for the client user to view...visually appealing user interface and hides the complexity

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of the spreadsheet from the user”; column 5, lines 29-58; column 6, line 60-column 8, line 8:

“permits a myriad of different workflows to be designed and carried out...graphical user interface...column 8, lines 9-19: "a program or command structure is created in each client computer...outgoing data")(Figs. 1 and 3).

**-In regard to independent claim 40,** Khan teaches a computer program product comprising: a computer-readable, tangible storage device; first program instructions of a program to define and initiate display of a user interface to a program; second program instructions of the program to define a spreadsheet within the program, the spreadsheet being distinct from the user interface; third program instructions of the program to transfer, to one or more cells in the spreadsheet, user data input to the user interface; and wherein the spreadsheet includes fourth program instructions of the program to receive and process, from the one or more cells in the spreadsheet, the user data input transferred from the user interface; and the first, second, third and fourth program instructions are stored on the computer- readable, tangible storage device (column 4, lines 2-39: “electronic form...it is prudent to hide this data from the users to prevent errors...uses electronic forms as the means of allowing users to interface with the spreadsheets...fields and other objects in the forms...are linked to cells in the local spreadsheet...fields in the form display the contents of the cell(s) they are linked to...user edits or enters data in to the form fields, the data is entered into the spreadsheet...instantaneously recalculated, and the new values are automatically updated on the form...does not see and is unable to change any of the cells other than those which are linked to the form...workflow application...calculations are performed in the local spreadsheets...use of spreadsheets to



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perform calculations also precludes the need to having to write programs...electronic forms as a 'window' for the client user to view...visually appealing user interface and hides the complexity of the spreadsheet from the user"; column 5, lines 29-58; column 8, lines 9-19: "a program or command structure is created in each client computer...outgoing data")(Figs. 1 and 3).

**-In regard to independent claim 41**, Khan teaches wherein the program prevents the user from observing or changing the spreadsheet (column 4, lines 2-39: "electronic form...it is prudent to hide this data from the users to prevent errors...uses electronic forms as the means of allowing users to interface with the spreadsheets...fields and other objects in the forms...are linked to cells in the local spreadsheet...fields in the form display the contents of the cell(s) they are linked to...user edits or enters data in to the form fields, the data is entered into the spreadsheet....instantaneously recalculated, and the new values are automatically updated on the form...does not see and is unable to change any of the cells other than those which are linked to the form...workflow application...calculations are performed in the local spreadsheets...use of spreadsheets to perform calculations also precludes the need to having to write programs...electronic forms as a 'window' for the client user to view...visually appealing user interface and hides the complexity of the spreadsheet from the user).

11. Claims 3, 7, 8, 14, 23, 27, 33, 40, and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Waldau (US-2003/0226105 12/04/03).

**-In regard to independent claim 3**, Waldau teaches a method of facilitating development of programs, said method comprising: providing an interface of a program;

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including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output, wherein the spreadsheet of the program is unchangeable by a user; and displaying the output; and wherein having the spreadsheet execute logic of the spreadsheet avoids re-coding of logic of the spreadsheet (Paragraph 21: "spreadsheet is analyzed and a representation or a 'copy' is created...retain the interactive capabilities...for the end user...only a viewer, which means that the end user cannot redefine the formulas of the spreadsheet; only the constants can be changed"; Paragraph 22: "end user may then use the functions that are implemented in the spreadsheet"; Paragraphs 48-50: "create a version of it that can be transferred and made accessible...subpart of a bigger application...cells are input or output...support for functions that are needed"; Paragraphs 62-67: "input cell...output cell"; Paragraph 106: "inferred types...used to improve the user interface"; Paragraphs 254-260: "all cells with constants be input cells and all cells with formulas be output cells...final result...embedded within a user interface program and used directly by the end user" Paragraphs 262-266: "user interface...for each input, the event that signals that the value of the component has changed, will be connected to a function that recalculates all or some of the outputs and updates the user interface...special validation...ensures that the value entered is legal"; Paragraph 303: "automatically generating a user interface from a spreadsheet...end user make calculations"; Paragraph 361)(Figs. 9 & 10).

**-In regard to substantially similar independent claims 7, 23, and 33,** Waldau teaches a method, system, and article of manufacture comprising a computer readable medium storing program code for facilitating development of programs, said method comprising: providing an

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interface of a program; including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output, wherein the spreadsheet of the program is unchangeable by a user; and displaying the output; and wherein the including comprises enabling interaction between the interface and the spreadsheet; and the enabling interaction comprises providing to the spreadsheet one or more inputs from the interface (Paragraph 21: "spreadsheet is analyzed and a representation or a 'copy' is created...retain the interactive capabilities...for the end user...only a viewer, which means that the end user cannot redefine the formulas of the spreadsheet; only the constants can be changed"; Paragraph 22: "end user may then use the functions that are implemented in the spreadsheet"; Paragraphs 48-50: "create a version of it that can be transferred and made accessible...subpart of a bigger application...cells are input or output...support for functions that are needed"; Paragraphs 62-67: "input cell...output cell"; Paragraph 106: "inferred types...used to improve the user interface"; Paragraphs 254-260: "all cells with constants be input cells and all cells with formulas be output cells...final result...embedded within a user interface program and used directly by the end user" Paragraphs 262-266: "user interface...for each input, the event that signals that the value of the component has changed, will be connected to a function that recalculates all or some of the outputs and updates the user interface...special validation...ensures that the value entered is legal"; Paragraph 303: "automatically generating a user interface from a spreadsheet...end user make calculations"; Paragraph 361)(Figs. 9 & 10).

**-In regard to dependent claim 8,** Waldau teaches wherein the enabling comprises performing at least one of one or more checks and one or more tasks in preparation of the

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providing (Paragraph 106: "improve user interface"; Paragraph 266: "input requires special validation...ensures that the value entered is legal").

**-In regard to substantially similar independent claims 14 and 27,** Waldau teaches a method and system of facilitating development of programs, said method comprising: providing an interface of a program; including in the program a spreadsheet that is to execute logic of the spreadsheet in response to data of the interface to produce output, wherein the spreadsheet of the program is unchangeable by a user; displaying the output; and replacing by other than the user one or more calculations of the spreadsheet and avoiding re-coding of the interface (Paragraph 21: "spreadsheet is analyzed and a representation or a 'copy' is created...retain the interactive capabilities...for the end user...only a viewer, which means that the end user cannot redefine the formulas of the spreadsheet; only the constants can be changed"; Paragraph 22: "end user may then use the functions that are implemented in the spreadsheet"; Paragraphs 48-50: "create a version of it that can be transferred and made accessible...subpart of a bigger application...cells are input or output...support for functions that are needed"; Paragraphs 62-67: "input cell...output cell"; Paragraph 106: "inferred types...used to improve the user interface"; Paragraphs 254-260: "all cells with constants be input cells and all cells with formulas be output cells...final result...embedded within a user interface program and used directly by the end user" Paragraphs 262-266: "user interface...for each input, the event that signals that the value of the component has changed, will be connected to a function that recalculates all or some of the outputs and updates the user interface...special validation...ensures that the value entered is

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legal"; Paragraph 303: "automatically generating a user interface from a spreadsheet...end user make calculations"; Paragraph 361)(Figs. 1, 9, & 10).

**-In regard to independent claim 40**, Waldau teaches a computer program product comprising: a computer-readable, tangible storage device; first program instructions of a program to define and initiate display of a user interface to a program; second program instructions of the program to define a spreadsheet within the program, the spreadsheet being distinct from the user interface; third program instructions of the program to transfer, to one or more cells in the spreadsheet, user data input to the user interface; and wherein the spreadsheet includes fourth program instructions of the program to receive and process, from the one or more cells in the spreadsheet, the user data input transferred from the user interface; and the first, second, third and fourth program instructions are stored on the computer- readable, tangible storage device (Paragraph 21: "spreadsheet is analyzed and a representation or a 'copy' is created...retain the interactive capabilities...for the end user...only a viewer, which means that the end user cannot redefine the formulas of the spreadsheet; only the constants can be changed"; Paragraph 22: "end user may then use the functions that are implemented in the spreadsheet"; Paragraphs 48-50: "create a version of it that can be transferred and made accessible...subpart of a bigger application...cells are input or output...support for functions that are needed"; Paragraphs 62-67: "input cell...output cell"; Paragraph 106: "inferred types...used to improve the user interface"; Paragraphs 254-260: "all cells with constants be input cells and all cells with formulas be output cells...final result...embedded within a user interface program and used directly by the end user" Paragraphs 262-266: "user interface...for each input, the event that

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signals that the value of the component has changed, will be connected to a function that recalculates all or some of the outputs and updates the user interface...special validation...ensures that the value entered is legal"; Paragraph 303: "automatically generating a user interface from a spreadsheet...end user make calculations"; Paragraph 361)(Figs. 9 & 10).

**-In regard to independent claim 41**, Waldau teaches wherein the program prevents the user from observing or changing the spreadsheet (Paragraph 21: "spreadsheet is analyzed and a representation or a 'copy' is created...retain the interactive capabilities...for the end user...only a viewer, which means that the end user cannot redefine the formulas of the spreadsheet; only the constants can be changed")(Figs. 9 & 10).

### **Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please note the newly cited references on the PTO-892 form.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam L. Basehoar whose telephone number is (571)-272-4121.

The examiner can normally be reached on M-F: 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Adam L Basehoar/  
Primary Examiner, Art Unit 2178